School of Medicine

University of California, Davis

ACTIVE WORK TOWARD the establishment of a four-year curriculum in medicine at Davis began in February of 1966 with the arrival of C. J. Tupper, M.D., as Dean and Professor of Medicine. At that time, the dean was charged by Chancellor Emil M. Mrak with creating a four-year medical school at Davis as fast as possible, doing it efficiently, effectively, economically, with constant attention to excellence, and involving innovations in medical education.

The Dean and his faculty elected to simultaneously teach and build. Thus, they are in active construction of a "surge" campus to occupy until such time as permanent facilities become available, starting in the early 1970's. The surge facilities are Butler type, semi-prefabricated steel. A Health Sciences Library, occupied jointly with Veterinary Medicine, has been constructed and occupied, as has an initial faculty office and laboratory building. Active construction of student multidisciplinary teaching laboratories and additional faculty offices, lecture halls, and other supporting facilities is under way to provide space for teaching 48 entering medical students beginning 23 September 1968. The elapsed time, therefore, between the arrival of the Dean and the admission of students will be slightly over two and a half years.

The school, in preparing for admission of its first class, has received more than 1,500 requests for application materials and nearly 600 formal applications. Eighty-five percent of the applicants have been California residents. The incoming class has been selected and the caliber of students is considered by the admissions committee to be very high.

The faculty, which was seven in number by mid-1967, now totals 35 people on the scene with all basic science chairs filled, and a number of clinical chairs as well.

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The School of Medicine at Davis will provide students with a firm foundation of medical knowledge upon which they may develop a career in general or specialty practice, teaching, research, public health or administration. To accomplish this, an environment is being created that will attract students and faculty of excellence, that will provide maximum opportunity for the student to learn significant facts and principles, and that will enable and stimulate the student to develop intellectual inquiry and the self-discipline of responsibility for his own continuing education. The school and its faculty will strive to set by example the standards of clinical practice and responsible scientific inquiry that are the foundations of continuing professional competence.

The Dean and his faculty hold the position that medical schools can no longer afford the luxury of considering their responsibility completed with the awarding of the M.D. degree. They observe that 80 percent of the medical graduates in the United States go on to advanced training beyond the internship and hold that participation in this portion of medical education, as well as in the continuing education of the practicing physician, is an ever more clear responsibility of medical education.

The faculty is desirous of deemphasizing rigid departmental lines and for this reason has designed an interdisciplinary integrated curriculum. In addition, it plans introduction of clinical material from the outset. The artificial barriers between normal and abnormal, between basic and clinical, will similarly be deemphasized. The sciences basic to medicine will be presented in such a manner as to emphasize their relevance to clinical medicine. It is believed that such an approach will foster not only higher student motivation and performance but will at the same time provide the logical vehicle for learning medicine as a problem-solving discipline rather than a prodigious exercise in memorization and recall.

Upon enrolling in September, the medical students will stay in continuous enrollment for 15 consecutive quarters. The total contact time in a week will be approximately 20 hours. The remainder of the week will be unscheduled time that the student may use to take elective courses or in other ways that he deems most constructive in his studies.

The four-year program is organized into three core areas, plus "free time" during the first three years and a fourth year of electives chosen with faculty guidance. In the first year, referred to as Core A, four areas are included. These are: (1) molecular and cell biology; (2) organ and system biology; (3) introduction to clinical medicine; and (4) behavioral and environmental biology. In the behavioral and environmental biology course, attention will be given to psychological, sociologic, legal and economic problems concerned in medical care and in medical practice and attention will be given to the development of an awareness of the interaction of medicine and the community. The context of this course will also permit consideration of some of the significant literature related to the humanities in medicine.

The second year, or Core B, extends over four academic quarters totaling approximately 45 weeks. It will function around a patient problem-solving theme presented in the framework of organ systems. Specific clinical symptom-complexes have been selected for consideration in ten organ system areas as follows: (1) reproductive maturative; (2) neurodirectives; (3) chemodirectives; (4) hematopoietic-lymphoreticular; (5) cardiovascular; (6) respiratory; (7) urinary; (8) alimentary; (9) tegumentary; and (10) biomechanical-traumatic. Within each of these groups, the central problem of an abnormal clinical state (pathology) will be considered from the vantage points of the basic medical sciences and the medical and surgical specialties. Instruction in Core B will focus on the complaints of the patient presented live or through audiovisual aids, including moving pictures and videotapes. Laboratory studies will be directed toward exploration of underlying basic pathophysiology and rational therapeutic approaches. The introduction of physical diagnosis and history taking begun during Core A will be continued and expanded during this second year.

The third year, or Core C, comprises four academic quarters and provides expansion of experience with patients through clinical clerkships. Active exploration for the development of a method to allow students to follow a given patient from admission throughout his stay in hospital, including inter-service transfers and then follow-up after discharge from hospital, is under study, as are the logistic problems that are involved.

The fourth year of four quarters is to be made up of electives, or selectives, chosen with the guidance of the faculty advisor or preceptor. The activities within the year will be available at the school and at other institutions as well, where surrogate faculty members will be identified.

For the initial classes, the Sacramento County Hospital will represent the primary clinical resource. It is located 14 expressway miles from the Davis Campus and is a newly renovated 650-bed general facility. The permanent Medical Science Building on the Davis Campus is scheduled for occupation in 1973 and a 350-bed referral type University Hospital on the campus is scheduled for occupation in 1975. A continuing close affiliation with the Sacramento County Hospital, even after the University Hospital is available, is envisaged. It is also expected that a 740-bed Veterans Administration Hospital on the Davis Campus immediately adjacent to the University Hospital will be available. As these additional facilities come into use, the entering class size will be progressively increased to a planned maximum of 128 entering medical students. A full spectrum of residencies is under active development at the Sacramento County Hospital, with approved programs in general surgery, internal medicine and anesthesiology having been developed since the inception of the school, and many others are in active development.

Effective interaction in teaching and research between the School of Medicine and the School of Veterinary Medicine is already taking place and provides an exciting asset for the development of medical education at Davis, as do many of the other campus facilities, such as the National Center for Primate Biology, the Atomic Energy Commission-supported Radiobiology Laboratory, the new cyclotron, the Department of Nutrition and Animal Physiology in the School of Agriculture, and many others.

In spite of financial restrictions and limitations of space and equipment, the morale of the faculty is high and the Davis spirit of drive, momentum, and enthusiasm continues apace.

C. J. TUPPER, M.D.